Small Satellite Transceiver for Launch Vehicles, Phase II



Completed Technology Project (2007 - 2009)

Project Introduction

NAL Research Corporation proposes to develop a small, light-weight, low-cost transceivers capable of establishing satellite communications links for telemetry and control during the launch and ascent stages of flight. The proposed transceiver will offer continuous and truly global coverage. When data are sent from a launch vehicle, the signals are received immediately by one of the LEO satellites and relayed in real-time to command and control center via either Public Switched Telephone Network/Public Data Networks (PSTN/PDN), directly to another transceiver, through the Internet or through a direct IP address. The entire process can take a fraction of a second. This will provide electronic global access to airborne vehicles from any place.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Туре	Location
☆Goddard Space Flight Center(GSFC)	Lead	NASA	Greenbelt,
	Organization	Center	Maryland
NAL Research	Supporting	Industry	Manassas,
Corporation	Organization		Virginia



Small Satellite Transceiver for Launch Vehicles, Phase II

Table of Contents

Project Introduction	
Primary U.S. Work Locations	
and Key Partners	1
Organizational Responsibility	1
Project Transitions	
Project Management	
Technology Areas	

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Goddard Space Flight Center (GSFC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer



Small Business Innovation Research/Small Business Tech Transfer

Small Satellite Transceiver for Launch Vehicles, Phase II



Completed Technology Project (2007 - 2009)

Primary U.S. Work Locations		
Maryland	Virginia	

Project Transitions

0

December 2007: Project Start



December 2009: Closed out

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX07 Exploration Destination Systems
 - └─ TX07.2 Mission
 Infrastructure,
 Sustainability, and
 Supportability
 - ☐ TX07.2.4 Micro-Gravity
 Construction and
 Assembly

